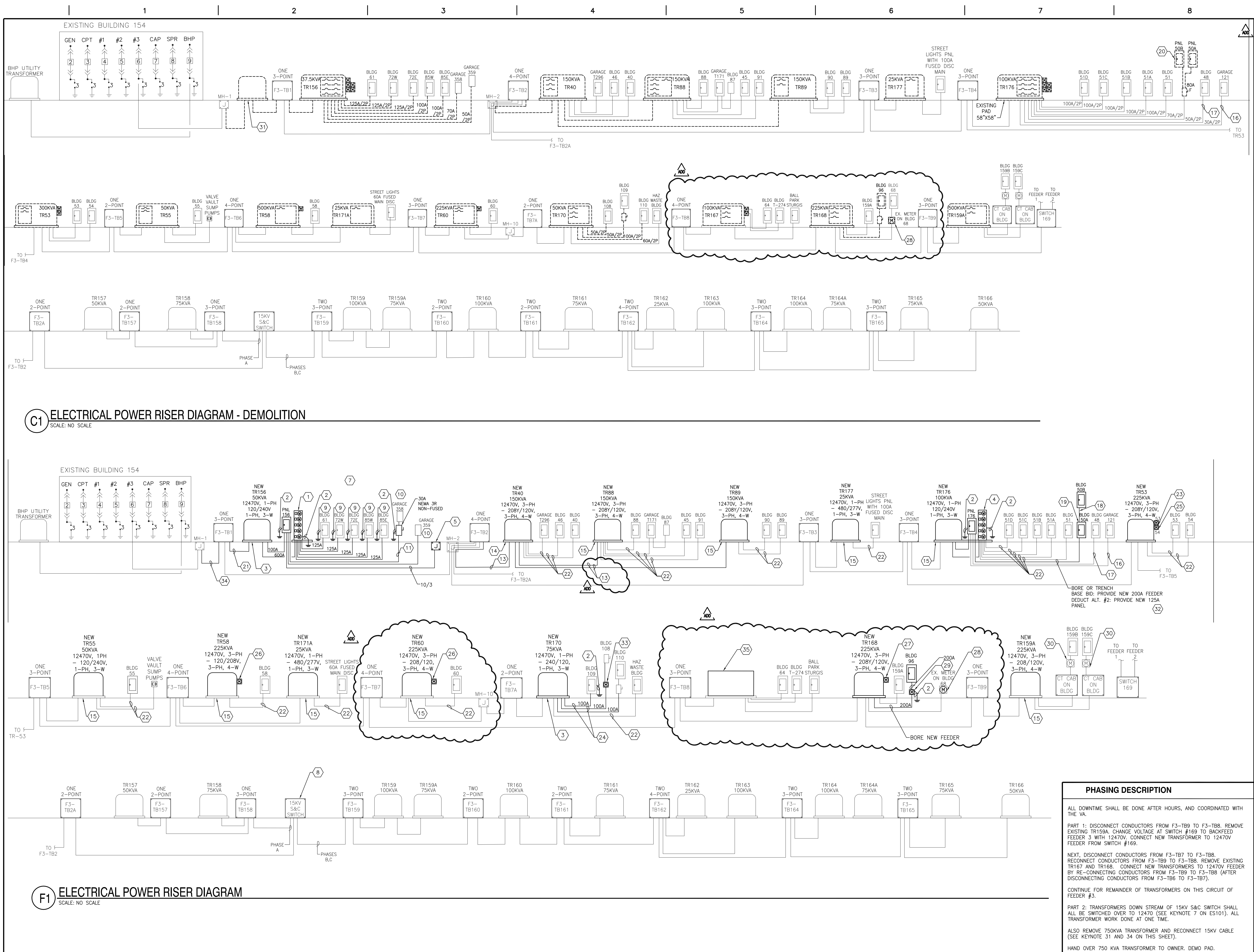


A
B
C
D
E
F

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot



SHEET GENERAL NOTES

- ALL LOW VOLTAGE FEEDERS SHALL BE TRENCHED OR BORED (CONTRACTOR'S CHOICE), REPLACE AND PATCH TO MATCH. REFER TO SECONDARY TRENCH DETAIL, THIS SHEET. MULTIPLE LOW-VOLTAGE FEEDERS MAY BE COMBINED IN A COMMON TRENCH WHEREVER PRACTICAL. CONTRACTOR TO PROVIDE AS-BUILT LOCATIONS OF FEEDERS. PROVIDE LONG SWEEP CONDUIT ELBOWS AT TRANSFORMER LOCATIONS AND STUB-UPS TO BUILDINGS. PROVIDE DIRECT-BURY SECONDARY FEEDERS THROUGHOUT UNLESS NOTED OTHERWISE.
- ALL MEDIUM VOLTAGE FEEDERS SHALL BE DIRECT BORED.
- DEDUCT ALTERNATE #1: PROVIDE SPARE TRANSFORMERS: ONE 225KVA, ONE 100KVA, AND ONE 50KVA. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- DASHED LINES INDICATE EQUIPMENT TO BE REMOVED.

SHEET KEYNOTES

- PROVIDE NEW 120/240V 1-PHASE, 3 WIRE, 10 KVA METER CENTER WITH 600A MAIN BUS SECTION, FIVE METER SOCKETS (FIVE 125A WITH BREAKERS) AND LEVER BYPASS. REUSE EXISTING METERS. METER CENTER TO BE MOUNTED ON BACK SIDE OF GARAGE 359. SEE DETAIL 36/E-501, FOR PAD REQUIREMENTS.
- REFERENCE ELECTRICAL GROUNDING DETAIL ON SHEET E-501.
- PROVIDE NEW PAD, REFERENCE TRANSFORMER PAD AND TRANSFORMER GROUNDING DETAILS ON SHEET E-501. TYPICAL FOR ALL NEW TRANSFORMERS.
- PROVIDE NEW 120/240V 1-PHASE, 3 WIRE, 42 KVA METER CENTER WITH 600A MAIN BUS SECTION, FIVE 100A METER SOCKETS (FIVE WITH BREAKERS) AND LEVER BYPASS. REUSE EXISTING METERS. METER CENTER TO BE MOUNTED ADJACENT TO TRANSFORMER ON SAME PAD. PROVIDE UNISTRUT SUPPORT. SEE DETAIL 36/E-501.
- PROVIDE IN-GRADE JUNCTION BOX, LOCATE AT DEMOLISHED TRANSFORMER. SPLICE TWO STREET LIGHT CIRCUITS. EXISTING FEEDER CONDUIT TO BUILDING CAN BE USED TO GET PARTIALLY BETWEEN PANEL AND ORIGINAL TRANSFORMER PAD LOCATION.
- ALL PRIMARY MEDIUM-VOLTAGE CABLES SHALL BE DIRECTLY BORED. TYPICAL OF ALL MEDIUM-VOLTAGE UNDERGROUND INSTALLATIONS UNLESS NOTED OTHERWISE.
- REFERENCE SECONDARY TRENCH DETAIL, 58/E-501. TYPICAL OF ALL LOW-VOLTAGE UNDERGROUND INSTALLATIONS UNLESS NOTED OTHERWISE.
- EXISTING SWITCH, REPLACE FUSES. SIZE FUSES PER COORDINATION STUDY.
- EXISTING GROUNDING ELECTRODE SYSTEM TO REMAIN.
- PROVIDE TWO 20A/1 POLE FEEDS. ONE FEED TO GARAGE LIGHTING AND ONE TO GARAGE RECEPTACLES. EXTEND CIRCUITS AS NEEDED.
- BELOW GRADE #10/3 DIRECT BURY CABLE CAN BE USED. TRENCH.
- WORK MUST BE DONE ON A SATURDAY. (COMPLETE WORK WITH REPLACEMENT OF TR 40, TR 88, AND TR 89, ALL ON SAME DAY.)
- PROVIDE NEW 15KV CABLE, 3 PHASE #2/0 CU AND ONE #2/0 BARE CU GROUND. USE EXISTING SPARE 4" CONDUIT.
- EXISTING PAD IS 72" X 71", IF NEW TRANSFORMER FITS ON PAD, EXISTING CAN BE REUSED. OTHERWISE, PROVIDE NEW PAD.
- IF NEW TRANSFORMER FITS ON PAD, EXISTING CAN BE REUSED. OTHERWISE, PROVIDE NEW PAD.

IF EXISTING PAD IS USED, CONTRACTOR TO VERIFY PRIMARY AND SECONDARY CONDUITS/CONDUCTORS FIT IN THE TRANSFORMER COMPARTMENTS. OTHERWISE, OVERSIZE COMPARTMENTS AS NEEDED.

IF NEW TRANSFORMER DOES NOT COVER PRIMARY AND SECONDARY OPENINGS IN PAD, FILL KNOCK OUT SPACE IN PAD WITH CONCRETE SO OPENING IS NOT VISIBLE FROM EXTERIOR.

- REPLACE AND EXTEND FEEDERS TO NEW PANEL 176. UNDER DEDUCT ALTERNATE #2, ELIMINATE BORE FOR A NEW 2" HOPE WITH 100A, 3-PH, 4-W FEEDER.
- REPLACE FEEDER AND EXTEND TO NEW PANEL. UNDER DEDUCT ALTERNATE #2, ELIMINATE BORE IN A NEW 2" HOPE WITH 125A, 3-PH, 4-W FEEDER.
- EXTEND EXISTING 1" CONDUIT FROM PANEL 50B TO NEW PANEL 50A. PROVIDE NEW 50A FEEDER TO PANEL 50B (FROM PANEL 50A). UNDER DEDUCT ALTERNATE #2, ELIMINATE REPLACING PANEL 50B. REMOVE PANEL INTERIOR AND SPLICE CIRCUITS TO NEW PANEL. LOCATE NEW PANEL ADJACENT TO EXISTING. PANEL CAN BE SURFACE OR RECESSED. PROVIDE BLANK COVER ON EXISTING PANEL HOUSING AND USE AS JUNCTION BOX.
- UNDER DEDUCT ALTERNATE #2, ELIMINATE REPLACING 50A PANEL WITH 200A PANEL. REMOVE PANEL INTERIOR AND SPLICE CIRCUITS TO NEW PANEL. LOCATE NEW PANEL ADJACENT TO EXISTING. PANEL CAN BE SURFACE OR RECESSED. PROVIDE BLANK COVER ON EXISTING PANEL HOUSING AND USE AS JUNCTION BOX.
- UNDER BASE BID, REPLACE 50A PANEL WITH 125A PANEL.
- UNDER DEDUCT ALTERNATE #2, PANEL TO REMAIN.
- REPLACE FEEDER, DIRECT BORE IN A NEW 4" HOPE WITH ONE #2/0 CU 15KV AND ONE 2/0 CU 600V GROUND (C-PHASE).
- EXTEND AND RECONNECT EXISTING SECONDARY FEEDER CONDUCTORS AND CONDUIT.
- PROVIDE NEW 3 PHASE METER AND INSTRUMENT TRANSFORMER SOCKET/CABINET WITH 400/5 CTS.
- NEW 100A FEEDER, 1-PHASE, BORE NEW FEEDER, USE HOPE RACEWAY FOR NEW CONDUCTORS. FOR BUILDING 108 TERMINATE TO PANEL. FOR BUILDING 108 PROVIDE FEEDER TO NEW METER AND CONTINUE TO TERMINATE TO EXISTING BUILDING DISCONNECT.
- PROVIDE NEW 1 PHASE METER AND INSTRUMENT TRANSFORMER SOCKET/CABINET WITH 600/5 CTS.
- PROVIDE NEW 3 PHASE METER AND INSTRUMENT TRANSFORMER SOCKET/CABINET WITH 400/5 CTS.
- PROVIDE NEW 3 PHASE METER IN EXISTING SOCKET.
- PROVIDE NEW 3 PHASE 200A METER WITH 200A CIRCUIT BREAKER AND BYPASS SOCKET FOR BUILDING 96. REPLACE FEEDER ALL THE WAY TO PANEL 96. REPLACE PANEL 96 WITH NEW, GROUNDING ELECTRODE SYSTEM WILL BE AT BREAKER IN METER.
- PROVIDE NEW 400/5 CTS AND NEW METERS IN EXISTING SOCKETS ON BUILDING.
- REMOVE EXISTING 750 KVA, 12470V/4160V TRANSFORMER AND PAD. HAND OVER TO OWNER.
- FEEDER REDUCED TO 125A WITH DEDUCT ALTERNATE #2.
- PROVIDE NEW METER AND BYPASS SOCKET FOR BUILDING 108. RECONNECT/EXTEND FEEDER TO PANEL AS REQUIRED.
- RETERMINATE EXISTING CABLING BETWEEN MH-1 AND F3-TB1 FOR RECONNECTION OF FEEDER 3.
- SECTIONALIZER WILL BE PROVIDED BY OWNER, INSTALLED BY DIVISION 26 ON EXISTING PAD (AFTER TR167 IS REMOVED). EXISTING PAD DOES NOT NEED TO BE MODIFIED. PARK HIGH VOLTAGE CABLES ON STANDOFFS WITHIN SECTIONALIZER.

CONSULTANTS:		ARCHITECT/ENGINEERS:		Drawing Title POWER RISER DIAGRAM	Project Title Primary Voltage Upgrade, Phase 2	Project Number 568-14-101	Office of Construction and Facilities Management Department of Veterans Affairs
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Revisions					Date 06/29/2015	Checked DLB	
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